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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/526,103

01/12/2006

Antonio Pita-Szczesniewski

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7590 02/28/2008
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EXAMINER

NGUYEN, PHU HOANG

ART UNIT

PAPER NUMBER

1791

MAIL DATE

DELIVERY MODE

02/28/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/526,103	Applicant(s) PITA-SZCZESNIEWSKI, ANTONIO	
	Examiner PHU H. NGUYEN	Art Unit 1791	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 November 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 4-6 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,4-6 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Objections

Claim 1 is objected to because of the following informalities: claim 1 contains the phrase “decarbonizatin” that should have been “decarbonization”. For purpose of examination, the Examiner assumes that the Applicant meant to recite “decarbonization” instead of “decarbonizatin”. Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1 and 4-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Szczesniewski et al. (U.S Patent No. 6358870) in view of Bair (U.S Patent No. 2220750).

Regarding claims 1, Szczesniewski discloses a method for preparing pre-reacted synthetic batches, with a low content of carbon dioxide, for the production of glass formulas, comprising the steps of:

mixing raw materials, minerals, partially treated minerals, intermediate products thereof or compounds, containing molecular systems selected from the group consisting of silica-sodium, silica-sodium-calcium, silica-sodium-magnesium, silica-calcium-magnesium, silica-sodium-calcium-magnesium, and mixtures thereof, in stoichiometric

amounts selected from one or more invariant points or points on a line connecting invariant points from a phase diagram; and

calcining the mixture at reaction temperatures which do not form a liquid phase and release CO₂ to produce said pre-reacted and carbon dioxide-free synthetic compound that totally saturates the sodium, sodium and calcium, or the sodium, calcium and magnesium of a molecular glass formula (claim 1 of Szczesniewski).

However, Szczesniewski does not expressly disclose the step of adding cullet as recited in the instant claim 1. Bair discloses in the formation of glass by conventional methods, a dry mixture of coarse sand, fluxes such as soda ash and lime and enough of glass (about 20 or 25%) as cullet to give desired melting properties to the mixture, is heated in pots or tanks to melt it down to fluid state (column 1, line 24-29). Therefore, it would have been obvious to one of ordinary skill in the art to add cullet which contains the molecular systems taught by Szczesniewski to raw material in process of making glass to save on cost of raw material.

Regarding claims 4-5, Bair further discloses the mass (corresponding to the claimed "agglomerated") can be mulled to form nodules, or can be formed into briquettes by suitable methods. These briquettes can then be dried to coherent state eminently suited for use in the formation of glass (column 2, line 41-51). Accordingly claim 4-5 are rejected.

Regarding claim 6, Szczesniewski further discloses the content of carbon dioxide in the pre-reacted batches can be between 1 and .5% by weight after 25 minutes of treatment (figure 3). Accordingly, claim 6 is rejected.

Response to Arguments

Applicant's arguments filed 11/28/2007 have been fully considered but they are not persuasive.

Applicant essentially argues that in order to obtain the unexpected results realized by Applicant, it is necessary to add or mix cullet with minerals, partially treated minerals or intermediate products therefrom, containing molecular systems selected from the group consisting of silica-sodium, silica-sodium-calcium, silica-sodium-magnesium, silica-calcium-magnesium, silica-sodium-calcium-magnesium, and mixtures thereof, in stoichiometric amounts selected from one or more invariant points or points on a line connecting invariant points from a phase diagram (emphasis added). The unexpected results obtained with the present invention cannot be obtained by the conventional technical means commonly employed by those skilled in the art to adjust the conditions for the calcining and the melting of glass. However, as discussed for claim 1 above, Szczesniewski et al. (U.S Patent No. 6358870) discloses the emphasis feature of the invention wherein the mixtures are in stoichiometric amounts selected from one or more invariant points or points on a line connecting invariant points from a phase diagram.

Applicant also argues that the results set forth at Table 1 of the specification, show the surprisingly beneficial effects that the cullet has in increasing the velocity of the calcination process, as well as in the decarbonization grade of the mixture (with a content of between 1 and 0.5% of carbon dioxide remaining). However, the results are not surprising since Szczesniewski et al. (U.S Patent No. 6358870) already discloses

the content of carbon dioxide in the pre-reacted batches can be between 1 and 0.5% by weight after 25 minutes of treatment (figure 3).

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, Applicant argues that Bair's disclosure which relates to the conventional and very well known process of producing glass. There is no motivation or suggestion in the references that they should be combined. It is only the instant specification which provides the motivation to combine. However, the Bair's disclosure provides evidence to add cullet to a method of processing glass. Therefore, it would have been obvious to one of ordinary skill in the art to add cullet which contains the molecular systems taught by Szczesniewski to raw material in process of making glass to save on cost of raw material.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., "when cullet was added to the nodules, it served as an added vehicle for conducting heat directly to the center of the nodules, and that this mechanism produced a quicker degasification time than the twenty five (25) minutes that had been reported previously") are not recited in the rejected claim(s). Although the claims are interpreted

in light of the specification, limitations from the specification are not read into the claims.
See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to PHU H. NGUYEN whose telephone number is (571)272-5931. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven Griffin can be reached on 571-272-1189. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1791

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

P.N 2/21/2008

/Philip C Tucker/

Supervisory Patent Examiner, Art Unit 1791